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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/635,723

08/07/2003

Toshihiro Ohtani

1095.1283

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09/22/2006

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EXAMINER

DIACOU, ARI M

ART UNIT

PAPER NUMBER

3663

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/635,723

Applicant(s)

OHTANI ET AL.

Examiner

Ari M. Diacou

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,6-8,10-15,17,18,21-23,25-40,43 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9,16 and 24 is/are rejected.
- 7) ☒ Claim(s) 41 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Claims Summary

1. There have been several amendments since the last action on the merits, for the sake of clarity, here is a summary of the sets of claims being dealt with in this office action (examined/unexamined means on the merits since the action mailed 8-19-2005):

- Claims 1-30: "Means for" apparatus claims, previously examined,
  - Claims 4, 5, 19, 20: **Cancelled** by applicant.
  - Claims 2-3, 6-8, 10-15, 17-18, 21-23, 25-30: **Withdrawn** for not reading on elected species.
  - Claims 1, 9, 16, 24: **Rejected** over Tsuda (with Wu), having only small net changes in scope since the last action.
- Claims 31-32: Method claims, unexamined, **withdrawn** for not reading on the elected invention.
- Claims 33-36: Apparatus claims, unexamined, **withdrawn** for not reading on elected species.
- Claims 37-40: Method claims, unexamined, **withdrawn** for not reading on the elected invention.
- Claims 41-42: "Means for" apparatus claims, unexamined, **objected to** as being a dependent claim with allowable subject matter.
- Claims 43-44: "Means for" apparatus claims, unexamined, **withdrawn** for not reading on the elected species.

### **Election/Restrictions**

2. Claims 2-3, 6-8, 10-15, 17-18, 21-23, 25-40, and 43-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and/or species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 14, 2006.

3. Applicant's election without traverse of Group II, species C, and subspecies (1) pointing to figures 21 and 14 respectively, on which claims 1, 9, 16, 24, 41, 42 read in the reply filed on August 14, 2006 is acknowledged.

### **Response to Arguments**

4. In the remarks filed 1-19-2006, applicant argued the following:
- A. On page 14, that the amendment overcomes the 112(2) rejection.
  - B. On pages 14-15, that the amendments to claims 1 and 16 (of the claims submitted 2-1-2006) overcome Tsuda.
5. Argument A. is convincing the rejection is hereby withdrawn.
6. Argument B is unconvincing, the amendments being referred to are not present in claims 1 and 16 any longer, but have been moved to claims 41-44.

### **Allowable Subject Matter**

7. Claims 41-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, **including a statement on record that applicant is invoking 35 USC 112 sixth paragraph.**

### **Claim Rejections - 35 USC § 102**

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 9, 16, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuda et al. (USP No. 6,038,063).

- Regarding claim 1, Tsuda discloses an optical transmission system which transports optical signals over an optical transmission line, comprising:
  - an optical transmitter, comprising: [Fig. 1, #8] [Col. 3, lines 52-53]
    - an optical amplifying means amplifies main signals, and [Fig. 1, #14] [Col. 3, lines 59-61]
    - an optical amplifying control means starts up said optical amplifying means, waiting a first predetermined time to raise output power of said optical amplifying means up to a desired level, in order to

Art Unit: 3663

- prevent an OSC signal from experiencing abrupt power variations;  
and [Fig. 13, #38, #34, #36] [Col. 4, lines 28-43]
- an optical receiver, comprising: [Fig. 1, #18] [Col. 3, lines 65-67]
  - a pump light emitting means produces a pump light for injection to the optic transmission line so as to make the optic transmission line serve as an amplifying medium, and [Fig. 3, #48] [Col. 4, lines 44-59]
  - a pump light emitting control means starts up said pump light emitting means, waiting a second predetermined time to raise the pump light to a desired power level, in order to prevent the OSC signal from experiencing abrupt power variations. [Fig. 3, #50] [Col. 4, lines 60-66]
- Regarding claim 9, Tsuda discloses The optical transmission system according to claim 1, wherein:
  - said optical receiver comprises a monitoring control means that watches at least one of main signal power and OSC signal power; [Fig. 13, #60] [Col. 8, lines 8-31]
  - said optical receiver sends an upstream OSC signal to notify said optical transmitter of monitoring results of said monitoring control means; and
  - based on the monitoring results received from said optical receiver, said optical amplifying control means calculates control step parameters for

use in raising the output power of said optical amplifying means in a stepwise fashion.

- Regarding claim 16, Tsuda discloses an optical transmission system which transports optical signals between upstream and downstream stations over an optical transmission line, each station comprising:
  - an optical amplifying means amplifies main signals; [Fig. 1, #14] [Col. 3, lines 59-61]
  - an optical amplifying control means starts up said optical transmitter, waiting a first predetermined time to raise output power of said optical amplifying means up to a desired level, in order to prevent an OSC signal from experiencing abrupt power variations; [Fig. 13, #38, #34, #36] [Col. 4, lines 28-43]
  - a pump light emitting means produces a pump light for injection to the optic transmission line so as to make the optic transmission line serve as an amplifying medium; and [Fig. 3, #48] [Col. 4, lines 44-59]
  - a pump light emitting control means starts up said pump light emitting means, waiting a second predetermined time to raise the pump light to a desired power level, in order to prevent the OSC signal from experiencing abrupt power variations. [Fig. 3, #50] [Col. 4, lines 60-66]
- Regarding claim 24, Tsuda discloses the optical transmission system according to claim 16, wherein:

- each station further comprises a monitoring control means that watches at least one of main signal power and OSC signal power; [#60]
- *the downstream station sends an upstream OSC signal to notify the upstream station of monitoring results of said monitoring control means;*
- *and*
- *in the upstream station, said optical amplifying control means calculates control step parameters, based on the monitoring results received from the downstream station, for use in raising the output power of said optical amplifying means in a stepwise fashion.*

10. The italicized clauses are essentially method limitations or statements or intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.



Art Unit: 3663

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

Art Unit: 3663

13. The references made herein are done so for the convenience of the applicant. They are in no way intended to be limiting. The prior art should be considered in its entirety.

14. The prior art which is cited but not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ari M. Diacou whose telephone number is (571) 272-5591. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMD 9/12/2006

  
JACK KEITH  
SUPERVISORY PATENT EXAMINER